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EPIDEMIC PREVENTION AND PREPAREDNESS

Award # AOT-G-99-00188-00

Final Report

July 31, 1999 — March 31, 2000



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I. INTRODUCTION

The goal of the International Rescue Committee's (IRC) Epidemic Prevention and Preparedness Program (EPP) is to increase the ability of Kosovo's public health system to respond to epidemics and outbreaks of infectious disease and thereby prevent excess morbidity. The IRC's EPP program is based on well-established strategies of epidemic prevention and preparedness, which are essential to any public health system.

The program addressed two primary health care needs in Kosovo: first, to prevent epidemics and control outbreaks of infectious disease in the aftermath of a devastating conflict; and, second, to rebuild a public health infrastructure that had suffered a significant period of financial and institutional neglect. Beneficiaries of the program were primarily public health professionals at the Institute of Public Health Kosova (IPH) at the main office in Pristina/Prishtina and in six constituent offices throughout the province. These professionals received training, supervision, and material support and were directly engaged in infectious disease surveillance and other issues of public health. Most importantly, however, the long-term beneficiaries will be the people of Kosovo. Through this generous grant, IRC and cooperating organizations laid a strong foundation upon which an effective infectious disease surveillance system for Kosovo was built.

A. Background

Mission in Kosovo: The IRC's mission in Kosovo is to provide humanitarian and rehabilitation assistance to hundreds of thousands of civilians disrupted and displaced by violent conflict. To complement direct assistance, the IRC also manages long-term programs that build social and cultural capacity, promote sustainability, and broaden local community initiatives. Where ethnic and religious differences persist, the IRC remains committed to serving all those vulnerable, especially children and adolescents, women, the elderly, and ethnic and religious minorities.

IRC International: Founded in 1933, the IRC is the leading nonsectarian, voluntary organization providing relief, protection and resettlement services for refugees and victims of oppression or violent conflict. The IRC is committed to freedom, human dignity and self-reliance. This commitment is reflected in well-planned resettlement assistance, global emergency relief, rehabilitation and advocacy for refugees.

IRC in the Balkans: IRC has been at work in the Balkans since 1992, actively responding to the needs of civilians during the conflict in the former Yugoslavia, and implementing projects both on its own and through partner organizations. Key activities included: emergency food, stove and firewood distributions; the operation of a nation-wide pharmacy network; referral and advocacy for refugee medical care and social services; support for asylum seekers; micro-enterprise development; and psychosocial assistance. IRC also established a successful NGO development program, repaired thousands of houses and 27 boiler systems in Sarajevo, built a water treatment facility in the Gorazde Tunnel to supply Sarajevo during the conflict. And finally, the IRC

established a large logistics infrastructure with transport fleet of 50 trucks and a multi-million dollar procurement unit.

IRC in Kosovo: Since early 1997, IRC has been one of the largest aid agencies operating in Kosovo. In August 1998, fighting in the western third of the province drove some 300,000 civilians into the mountains and across the border into Albania. The IRC responded immediately with emergency medical assistance, clothing, food and shelter. In the spring of 1999, when 750,000 refugees fled violence throughout the province into Macedonia, Albania, Montenegro and Bosnia, the IRC helped meet their needs.

During the post-conflict period, IRC has built upon its previous work and experience in the provincial Kosovo towns of Peć/Pejë, Prizren, Gnjilane/Gjilan, Kosovska Mitrovica/Mitrovice, and in its biggest city, Pristina/Prishtine. IRC also draws from its experience and expertise gained from missions throughout the world, and always seeks to establish and maintain constructive relationships with the local people and communities it serves.

B. Infectious Disease in Kosovo

Senior health officials in Kosovo indicated that epidemic prevention and control was the highest priority health intervention immediately following the conflict. This emphasis was based on two important facts. First, prior to the conflict outbreaks of infectious disease were common in Kosovo. Health data from the parallel health system — a system in which ethnic Albanians operated institutions separate from the official, Yugoslav-funded institutions that excluded them based upon their ethnicity — indicates that between 1990 and 1998, there were 170 registered outbreaks of infectious disease, with some 35,000 cases overall, of which 1,220 resulted in death. The majority of these cases were due to diarrheal disease. (Source: Isuf Dedushaj, MD, Epidemiologist and Vice Dean of the Medical School, University of Prishtine).

Second, in the aftermath of the conflict the public health care system — its physical, institutional, and personnel infrastructure — was in desperate need of reconstruction. In July 1999, when IRC's EPP program began, most essential public health care services throughout Kosovo — services like immunizations, pre and post-natal care and reproductive health — had been interrupted or had ceased entirely. Water sources were, and remain, contaminated and in many areas, sanitation services barely function. In the northwestern municipality of Dečani/Deçan, for example, an estimated 89% of health facilities were significantly damaged or destroyed; and as a result, a vulnerable population had little or no access of basic medical care. Given these conditions, the risk of infectious disease outbreaks — particularly diarrheal diseases and childhood infections like measles — was heightened considerably.

C. Public Health Infrastructure in Kosovo

Public health professionals in Kosovo are currently collaborating to re-establish and rebuild the public health infrastructure throughout the province. The main body responsible for implementing public health programs and for monitoring the health status of the population is the Institute of Public Health of Kosovo (IPH) and its constituent Institute for Health Protection, based in Pristina/Prishtina. The IPH has four main divisions: Epidemiology, Hygiene, Microbiology, and Social Medicine.

The IPH has a regional office in each of the six administrative health districts. These include: Peć/Pejë, Prizren, Djakovica/Gakova, Gnjilane/Gjilan, Kosovska Mitrovica/Mitrovice, and Urosevac/Ferizaj. Each district office has representatives from the four main IPH divisions. In addition, a hygiene specialist is present in each of the

IRC RESPONDS TO TULAREMIA OUTBREAK

KLINA MUNICIPALITY, May 12, 2000 — In response to the recent outbreak of tularemia, International Rescue Committee (IRC) epidemiologists, Dr. Jose Gaby Tshikuk Mulumba and Dr. Agim Siqueca, trained local specialists in the field as part of their outbreak investigation training program. In villages and towns throughout the Klina municipality, participants collected laboratory samples and clinical data, recorded case histories, selected controls, and used the EPI Info computer program to begin preliminary analysis of data in the field. The purpose of IRC's training is to provide participants with essential skills in outbreak investigation and communicable disease control, and thereby increase the IPH's capacity to plan for and prevent epidemics.

"Overall," Dr. Siqueca said, "the training was very successful. After examining 200 people we discovered that the tularemia outbreak peaked in January and that the form of the disease was benign. We also know now that tularemia is in decline." Results from the data collected are expected by May 18.

28 health houses – municipal hospitals — and satellite clinics, referred to as ambulantas, in neighboring rural communities.

The IPH is responsible for public health and the surveillance of infectious disease. Historically, health data was reported to the regional district office from health houses and ambulantas. Data was then collated, analyzed, and forwarded to the central office in Pristina/Prishtine. Unfortunately, the system worked poorly due to a lack of skilled staff, the poor tracking and reporting of surveillance data, inadequate communication, and the structural division between the Yugoslav state institutions and the parallel system operated by Albanians. Accurate and representative health data has therefore been very difficult to obtain. At the outset of IRC's EPP program, there was no functioning system of infectious disease surveillance in Kosovo.

D. The Role of the International Rescue Committee

In response to the above need, IRC's EPP program established an infrastructure for communicable disease surveillance and epidemic response throughout Kosovo. As stated above, the goal of the program was to prevent excess morbidity and mortality due to the spread of infectious diseases and to ensure early detection of emerging diseases for an effective response. To accomplish these goals, the IRC undertook the following:

- Conducted an assessment of the general health status and health resources of the population of Kosovo, in collaboration with the Institute of Public Health of Kosova (IPH).
- Ensured that standardized case management protocols were established for the management of infectious diseases and taught to Kosovar health professionals.
- Supported and equipped laboratories so that they are prepared for diagnostic testing of microbiological specimens.
- Supported public health surveillance throughout Kosovo to ensure the early detection of emerging infectious disease outbreaks.
- Provided central and district IPH offices with computers and communications equipment.
- Hosted regional training seminars on infectious disease outbreak investigation and control.

The following report will first describe the goals and achievements of this program. Second, it will summarize the manner and extent to which IRC implemented and accomplished the objectives. A summary of activities follows after a description of the objective, and in most cases, one or several annexes accompany each, provided supplied at the conclusion of the report.

The work IRC performed under this grant has resulted in some significant and far-reaching accomplishments. For example, IRC helped researchers from the Center for Disease Control (CDC) in Atlanta, Georgia, USA collect data for a mortality study of the population of Kosovo during the conflict. That study, "War and mortality in Kosovo, 1998-99: An epidemiological testimony" was published in the British medical journal, *The Lancet*. A press release and abstract of the study are included below.

II. PROJECT GOALS, ACTIVITIES, AND RESULTS

OBJECTIVE 1

Conduct an assessment of the general health status and health resources of the population of Kosovo.

The Centers for Disease Control (CDC), the International Rescue Committee (IRC), the Institute for Public Health Kosova (IPH) and the World Health Organization (WHO) conducted two comprehensive assessment surveys in accordance with the above objective, and worked closely together to obtain data for both surveys. The first was a cluster survey conducted Kosovo-wide of the ethnic Albanian population. On October 1, 1999, Dr. Paul Spiegel (CDC) made a brief presentation to the WHO-Kosovo and other interested NGOs, explaining the objectives, methodology and preliminary results of the survey.

The objectives of this first survey were as follows:

- Ascertain the demographics of the population of Kosovo;
- Assess the prevalence of infectious and chronic disease;
- Assess access to medical care and ascertain its cost;
- Assess the breast feeding practices of Kosovar women;
- Ascertain the immunization coverage of children between 6- 59 months of age;
- Assess decision making within the health care system;
- Examine water and sanitation;
- Determine the primary sources of income for the population of Kosovo.

IRC COLLECTED DATA FOR KOSOVO MORTALITY STUDY

PRISTINA/PRISHTINE, June 24, 2000 — The International Rescue Committee, in cooperation with Dr. Paul Spiegel and Peter Salama of the Center for Disease Control (CDC), the Institute of Public Health (IPH) Kosova, and the World Health Organization (WHO), collected data for a study published today in the medical journal *The Lancet*.

The study examines death rates in Kosovo during the recent conflict and suggests that 64% of deaths among Kosovar Albanians — approximately 12,000 people — were due to war-related violence. The rates are two-three times higher than prior to the conflict and peaked during the NATO bombing when ethnic cleansing by Serbs was at its most intense.

Results from the survey also reveal that men over the age of 50 died in much higher numbers than any other segment of the population. The authors believe Serbian forces deliberately targeted older men, and are using these results to advocate that future evacuation programs assist older people in order to save more lives. Indeed, in a two-stage cluster survey among 8,605 Kosovar Albanians conducted by IRC and its partners, analysis showed that older men were ten times more likely to be killed than women in the same age group, and more than three times as likely than young men.

Dr. Bill MacKenzie, IRC epidemiologist, and Marci Van Dyke, IRC's public health educator, led the survey team.

Dr. Spiegel's CDC team completed an analysis of this complex cluster survey in December. The team submitted the draft report to IRC, IPH, and WHO for their review, contributions and comment. Accordingly, the CDC revised and completed the report, sending the final version to IRC Kosovo in mid-January, 2000: *Kosovar Albanian Health Survey Report, September 1999*. (See Annex 1.)

The report was published, and bound copies were distributed to the Office of Foreign Disaster Assistance (OFDA), United States Agency for International Development (USAID), United Nations Mission in Kosovo (UNMIK), WHO, other relevant NGOs in Kosovo, and selected donors.

In addition to the data contained in the report, the CDC did an extensive analysis in an effort to evaluate conflict-related mortality for Kosovar Albanians. The results were published in the June issue of *The Lancet* (See Annex II for abstract of article.)

In September 1999, the IRC, its partners, and Action Against Hunger (AAH) conducted a second survey of the Serbian population in the municipality of Gnjilane/Gjilan and the city of Pristina/Prishtine. Data for this second survey was gathered and analyzed. A draft was written and is presently under review by all participants and the WHO-Kosovo. The review process was completed by the end of April, and a final report was distributed soon after. (See Annex III for attached confidential, draft manuscript. Please do not distribute).

OBJECTIVE 2

Ensure that standardized case management protocols are established for the management of infectious diseases and taught to Kosovar health professionals.

The IPH, the Medical Faculty of the University of Prishtine, IRC, WHO, and the International Medical Corps (IMC) worked in close collaboration to write and publish clinical case management protocols for infectious diseases with epidemic potential. The first printing included the following protocols:

GUIDELINES PUBLISHED FOR MANAGEMENT OF COMMUNICABLE DISEASES

PRISTINA/PRISHTINE, February 28, 2000 — The International Rescue Committee (IRC) published today "Guidelines for the Management of Communicable Diseases" for Kosovo. The guidelines are in the process of being distributed by the Institute of Public Health of Kosova (IPH) to ambulantas and health houses throughout the province.

The guidelines were established through the collaborative effort of the IPH, Medical Faculty of the University of Prishtine, the World Health Organization (WHO), the IRC, and the International Medical Corps (IMC). The IRC received funding for the publication from the Office of Foreign Disaster Assistance (OFDA).

The guidelines provide the foundation for a more comprehensive reference document on communicable diseases for Kosovar clinicians. The publication is in binder format, so information can be easily added and updated.

Currently, the guidelines focus on preventing and treating diseases with epidemic potential, including acute diarrhea, pneumonia, cholera, bacillary dysentery, hepatitis A and B, hemorrhagic fever syndrome, measles, influenza, meningitis, epidemic typhus, tetanus and neonatal tetanus. Comprehensive case management protocols are also included, and provide information on general background, clinical aspects, diagnosis, treatment and management, and the proper measures public health authorities can take.

The IRC has printed 500 copies of the guidelines in Albanian for distribution by IPH. Diseases being considered for future inclusion in the publication are tuberculosis, brucellosis, and rabies.

- bacillary dysentery (bloody diarrhea);
- cholera (severe watery diarrhea);
- acute uncomplicated diarrhea;
- measles;
- meningitis;
- louseborne typhus;
- pneumonia;
- hepatitis;
- hepatitis A and B;
- tetanus
- neonatal tetanus;
- hemorrhagic fevers;
- influenza.

Each disease is published on a separate piece of paper and placed in a binder in alphabetical order, in order to allow public health officials to update them in a quick and cost-effective manner. As printed, the protocols are meant to be "living" documents in which individual diseases will be updated and new ones added. Clinicians will have the most recent information, without having to reprint new reference manuals. (See Annex IV attached protocols in English. They were widely available in Albanian).

To encourage the integration of public health, primary care and family medicine, the protocols include public measures to be taken by the staffs of health care facilities — particularly the health houses and ambulantas throughout Kosovo —, and the regional and central IPH facilities. IRC printed 500 copies of the protocols. These binders were given to IPH for distribution. Throughout Kosovo, IPH distributed one copy to each ambulanta, several copies to each health house and one copy to each IPH epidemiologist.

Consideration was given to provide didactic training to clinicians regarding these protocols; however, IMC, which has one of the largest areas of responsibility for primary care in Kosovo, had already conducted physician training using comparable protocols for the management of the most important syndromes, namely diarrhea and pneumonia. IPH officials felt that further training in these areas would only duplicate the completed or ongoing efforts of others. In addition, there was an absence of available due to the tremendous amount of work and overtime the IPH staff was already doing. For example, much of the IPH staff was fully employed developing other essential areas of the public health infrastructure, like surveillance, immunization, epidemiological training, and others. For IRC to move forward on training clinicians on these protocols without the involvement of IPH would have, in our opinion, been counterproductive.

OBJECTIVE 3

Support and equip laboratories so that they are prepared for diagnostic testing of microbiological specimens.

Prior to the conflict, the diagnostic capabilities of the microbiology laboratories in Kosovo were rudimentary, with much of the equipment old, outdated or broken. In addition, the microbiologists were using all of the laboratory consumables, including emergency supplies, without any means of replacing them. This created a dire situation, since the media and reagents that were necessary for microbial bench work would be depleted and the ability to diagnose diseases limited. As a result, there was a potential that the general public health of the population Kosovo could decline.

With input from the microbiologists at the main IPH in Pristina and the regional IPHs, with additional input from the WHO microbiologist, an assessment of the immediate laboratory equipment and consumable needs was conducted. (See Annex V for a list of equipment and supplies). Purchases break down into the following categories:

- Equipment;
- Stains/other items;
- Media;
- Agglutination sera;
- Test kits and diagnostic antigens;
- Antibiotic discs;
- Glassware.

The main pieces of equipment that were purchased were class 1 and 2 biohazard safety cabinets, microscopes, incubators, refrigerators and freezers. Each IPH will have a minimum of one biohazard safety cabinet. In the past, microbiologists worked with infectious materials in the open. Now, they are able to work with infectious materials under regulated and safe conditions provided by biohazard safety cabinets.

All of the IPH laboratories needed microscopes, a basic microbial tool. The microbiologists can now perform presumptive identification tests using direct staining methods and observe the bacterial stains with the microscopes. In addition, the IPH laboratories are able to use the microscopes for basic parasitologic examination of samples. By enhancing the microbiologists' capabilities with microscopes, time and supplies are saved.

IRC EQUIPS IPH MICROBIOLOGY LABS IN KOSOVO

PRISTINA/PRISHTINE, May 12, 2000 — The International Rescue Committee (IRC) began its largest scale distribution of laboratory equipment to Institute of Public Health Kosovo (IPH) microbiology facilities this week. The distributions are part of a \$400,000 program to equip and upgrade such labs across Kosovo.

IRC Microbiologist, Mark Grey, and his team distributed microscopes, biohazard safety cabinets, incubators, centrifuges, refrigerators, freezers and other essential equipment to the IPH Prishtine, where a primary reference microbiology lab supports five regional facilities in Prizren, Pec/Peje, Kosovska Mitrovica/Mitrovica, and Gnjilane/Gjilan. The IRC also provided a Mini- Vital, a blood bacteriology analysis machine, two computers and an API computer program. Similar distributions are set to begin in Gnjilane/Gjilan. With these distributions, the IRC hopes to help IPH begin building its diagnostic capacity to eventually meet European standards.

"Throughout Kosovo," Grey said, "the capacity of IPH microbiology labs to diagnose and treat infectious disease has, until now, been severely limited. The new equipment will improve IPH's diagnostic capabilities, provide physicians with more reliable data, and help microbiologist to better identify and track pathogens — all fundamental to any public health system."

Under the program, the IRC, with support from the World Health Organization (WHO), will also provide IPH labs with a one-year supply of consumables, such as agar and media, test kits, agglutination sera, stains and glassware. These labs are responsible for all clinical analysis within the IPH, providing diagnosis for referred patients, detecting diseases within the population, and tracking communicable diseases, including illness in children. The labs also test food and water for contamination throughout Kosovo.

Many of the incubators that were being used did not accurately maintain a constant temperature. For the growth of microorganisms, it is necessary to create a temperature stable environment, as microorganisms are temperature sensitive. With such equipment, it would be difficult to properly identify the pathogen that is causing the illness of a patient. The new incubators create a stable temperature environment and have improved the likelihood of identifying pathogens causing infections. Refrigerators and freezers were also purchased for storing and preserving specimens as well as for storing temperature sensitive reagents.

Other important items needed for basic microbiology are stains, sterile swabs and sterile sample collection containers. Stains are used for presumptive identification of bacteria or parasites. When it is determined that patients need to leave a sample for microbial analysis, the sterile swabs and sterile sample collection containers hold the sample and prevent contamination from other factors. By using these sterile swab and collection containers, the microbiologists are able to analyze specimens without worrying about outside contamination.

Once a specimen has been collected, it needs to be isolated and grown on agar or another growth medium. The laboratories needed many different agars and broths for growing, isolating and identifying the bacteria causing illness. A wide range of media was purchased for the IPHs to enhance their detection capabilities.

Bacteria are grown on selective media to produce pure cultures. There are several methods that can be employed to identify pure cultures of bacteria. Agglutination sera (antibody specific sera) are a common and efficient means for identifying pathogens commonly causing diarrhoeal diseases. The use of agglutination sera with samples is one of the most common microbial tests that the laboratories in Kosovo conduct; however, the emergency supply in the microbiology laboratories was being depleted quickly. Therefore, many different agglutination sera were obtained for the identification of strains and serotypes of *Shigella*, *Salmonella* and *E. coli*.

A number of different test kits were purchased to provide additional diagnostic capabilities for the microbiology laboratories for pathogens that they were unable to identify. These test kits include but are not limited to: API test strips and reagents for enterobacteria and anaerobic bacteria, mycoplasma/ureaplasma test kits, meningococcus test kits, pneumococcus test kits, chlamydia test kits, syphilis test kits and test kits for mononucleosis (Epstein-Barr virus).

Antibiotic discs were purchased for determining bacterial susceptibility. Once a pathogen has been isolated and identified, it is necessary to provide antibiotics to cure the patient. It is dangerous and costly to provide the patient with a wide range of antibiotics. Therefore, the isolated agent is grown on agar and exposed to several different antibiotics, which are on antibiotic discs. The antibiotic disc that creates the largest zone of no -growth is the antibiotic of choice for treating the patient. The IPHs were depleting the antibiotic disc supplies for antibiotic susceptibility tests. Therefore, more antibiotic discs were purchased for the IPH microbiology laboratories. The IRC also purchased only a small amount of glassware to supplement the more substantial glassware purchase made by WHO.

Prior to receiving this support, the diagnostic capabilities of the microbiology laboratories in Pristina and the region were severely limited. With the new equipment and media, reagents and other consumables, the laboratories are able to process more samples and identify a wider range of illness-causing pathogens. This effort has improved the public health of Kosovo by identifying pathogens and allowing quick and proper treatment.

OBJECTIVE 4

Support public health surveillance throughout Kosovo to ensure early detection of emerging infectious disease outbreaks.

The Infectious Disease Surveillance and Response Commission was founded and chaired by Dr. Isuf Dedushaj, Director of Epidemiology, IPH of Kosovo. He is supported by epidemiologists and a public health officer from WHO, and an epidemiologist, microbiologist, and public health manager from the IRC. Dr. Salama from the CDC is also a member of the team. The Commission drafted a surveillance proposal for an infectious disease surveillance module and then field-tested and modified the forms based upon feedback. (See Annex VI for surveillance system documentation.)

The overriding principles of the infectious disease surveillance module included:

- 1) Syndromic, rather than pathogen specific, reporting — with 19 syndromes currently suggested for reporting. This syndromic method of reporting was proposed because it improves the reporting of diseases for which laboratory tests are often not obtained (e.g. acute diarrhea). Moreover, in the current situation, laboratory follow-up is limited even for diseases for which laboratory testing is generally accomplished.
- 2) Case definitions would be used by primary care providers to report the appearance of an appropriate clinical condition, which would improve the specificity of a reported case as well as improve the uniformity of reported cases.
- 3) Syndromes would be reported in either an individual case or aggregate format on either an immediate or weekly basis. The following draft recommendations for the format and timing of reports have been agreed to:
 - a) Individual, immediate reporting of syndromes that may require prompt public health follow-up. These syndromes would include:
 - Suspected Cholera,
 - Bloody Diarrhea,
 - Haemorrhagic Fever,
 - Acute Flaccid Paralysis,
 - Meningitis,
 - Suspected Measles
 - Rubella
 - Diphtheria.
 - Immediate reporting would include individual information regarding name, address, date of birth, sex, date of consultation, syndrome, suspected diagnosis, date of onset, sample taken, laboratory confirmation, and vaccination status.
 - b) The individual, weekly reporting of syndromes that require direct, but not immediate, public health follow-up. These syndromes would include: Acute Jaundice Syndrome, Genital Ulcers, Urethral Discharge, Mumps, Pertussis, Neonatal Tetanus, Fever of Unknown Origin.
 - c) Aggregate, weekly reporting (instead of individual reporting) by primary care facilities for common syndromes that do not require direct public health follow-up, but may have programmatic implications. Syndromes to be reported in aggregate include: Acute Diarrhea, Lower Respiratory Tract Infection/Pneumonia, Intestinal Parasite Infections, Varicella, and Scabies. Reporting of aggregate data would be for three age groups: 0-4 years, 5-49 years, ≥ 50 years.
- 4) "Zero reporting" from primary care sites will be done for all syndromes as a means of prompting reporting.
- 5) Systematic analysis will be done at the Regional (initially paper-based) and Central IPH (computer-based). A computerized database has been created and data entry has begun
- 6) Feedback will be accomplished through a monthly epidemiologic report that will be distributed to the Regional IPH to report sources.

From December 13 through 15, IPH/WHO/IRC conducted a "training for surveillance trainers" workshop. Thirty-four central and regional IPH staff participated. (See Annex VII for course schedule, training materials, list of attendees and a summary of participant workshop evaluations).

From December 16 through December 30, IPH staff conducted a countrywide training of primary health care physicians on the use of case definitions and the completion of surveillance forms. IPH officials estimated that approximately 90%, or 1,200 primary health care physicians, received training during this time period and that the majority of the remaining physicians have subsequently been trained. The countrywide surveillance module began on January 1, 2000, with data collection by primary care physicians and subsequent transfer of data to the regional and central IPH. Miko Ryan of WHO -Geneva created a database for data entry and analysis by the

central IPH. The delivery of the program was delayed until February 23, due to an outbreak of *Shigella dysenteriae*, Type 1, in Malawi. Dr. Ryan had to travel to Africa to investigate during the latter half of January and early February. The IPH database program includes protocols for rapid, routine analysis data. Data entry began on February 28.

Completed forms have been reviewed by hand to monitor trends in disease incidence, reporting rates, and evaluation form completion. Supervisory visits by central and regional IPH/IRC/WHO staff to ambulancias and health houses began in late January and are ongoing. These supervisory visits have focused on sites where reporting rates are low (primarily in the regions of Peć/Pejë and Prizren) or forms are not completed correctly. Winter weather and transportation difficulties in January and February unfortunately slowed this effort.

OBJECTIVE 5

Support central and regional IPH offices with computers and communications equipment.

In November 1999, fourteen state-of-the-art computers, seven printers, seven fax telephones, and seven copiers were delivered to IPH facilities throughout Kosovo. Each regional IPH and the central IPH received two computers, one printer, one fax/telephone, and one copier. The computers were loaded with the following software: Microsoft Windows 98, Word, Excel, and Powerpoint.

An assessment of central IPH staff found a good level of computer training. The level of computer skills among regional staff was variable. From December through February, Cuban biostatisticians assigned to UNMIK, conducted three two week training courses on the basic use of computers for approximately 25 IPH regional staff (including epidemiologists and microbiologists) using the computers donated obtained by IRC through this grant. The training covered the use of Microsoft Windows, Word, and Excel.

IRC, WHO, and IPH have agreed to conduct a formal EPI- INFO training workshop for IPH central and regional staff in May 2000. Conducting EPI-INFO training prior to the completion of the infectious disease outbreak investigation workshop (held in late February) would have been confusing for participants. Some epidemiologic issues had to be covered prior to the receipt of training on analysis in EPI -INFO. In addition, since IPH staff time is primarily consumed with rebuilding the public health infrastructure, conducting training workshops more frequently than every two to three months would have a negative impact on other public health objectives (e.g. improving surveillance and immunization). However, the IRC epidemiologist is currently informally training three central IPH epidemiologists.

OBJECTIVE 6

Host a regional training seminar on infectious disease outbreak investigation and control.

Outbreak response teams were formed by the Central IPH to provide interim outbreak response until the Regional IPH offices received formal training for outbreak response. From February 24 – 27, 2000, IRC, in collaboration with IPH and WHO, conducted a workshop on Epidemic Preparedness and Response in Peć/Pejë, a war-ravaged municipality in northwestern Kosovo. The workshop hosted 29 IPH epidemiologists and microbiologists and was very well received. (See Annex VIII for workshop schedules and materials in both English and Albanian).

The objective of the Workshop was to train future participants in epidemic investigations (i.e. public health physicians, microbiologists, and infectious disease specialists) in the areas of:

- Epidemic preparedness and response;
- Operational issues faces while conducting field investigations;
- Basic study design;
- Descriptive and analytic tools used in conducting epidemic investigations;
- Planning and implementing disease control measures;
- Managing information and media during an outbreak.

IPH/IRC/WHO CONDUCT WORKSHOP ON EPIDEMIC PREPAREDNESS AND RESPONSE

PEC/PEJE, February 2000 — The Institute of Public Health of Kosova (IPH), the International Rescue Committee (IRC), and the World Health Organization (WHO) held a workshop on Epidemic Preparedness and Response in Pec/Peje on 24-27 February. The workshop consisted of lectures and case studies that focused attention on the principles of epidemic preparedness, investigation and management of outbreaks, outbreak analysis in case-control and cohort studies, establishment of control strategies, and communication with the media.

Workshop participants included 29 IPH epidemiologists and microbiologists and 5 WHO regional staff members, funded by the Office of Foreign Disaster Assistance (OFDA) through the IRC. Dr. Bill Mac Kenzie, IRC Consultant Epidemiologist, and Dr. Mike Ryan, WHO Geneva, gave the plenary lectures. Dr. Isme Humolli (IPH), Dr. Ariana Kalaveshi (IPH), Dr. Adriana Gjini (WHO), and Dr. Ramez Zemohkol (WHO) presented and facilitated the case study discussions for the workshop. Professor Isuf Dedushaj, Chief of Epidemiology at IPH and workshop chair, commented that the event marked a watershed in the history of public health in Kosova, especially at a time when scientific and statistical methods were being reintroduced into daily practice in public health centers throughout the province. Dr. Eric Schouten, WHO Regional Public Health Advisor, was pleased that IPH and WHO staff received the training jointly and that important working relationships were fostered.

The workshop is the second successful epidemiology workshop that IPH, IRC, and WHO have collaborated on. The first workshop, held in December of last year, focussed on epidemic surveillance. A future workshop, now in development, will provide training on a computer program for epidemiologic studies known as EPI INFO.

OBJECTIVE 7

Establish a community-based public health education and promotion campaign, with specific emphasis on infectious disease control.

The Commission for Health Promotion (CHP), chaired by Dr. Begolli, Director of Social Medicine IPH, was formed in August of 1999. The commission, composed of IPH, WHO and NGO representatives, was developed to ensure collaboration among groups working in health promotion throughout Kosovo. The CHP's goal is to develop a health promotion program to serve the Kosovar public. With technical assistance from IRC, CHP has developed programs, policies and protocols for community outreach, health education training for health personnel, health education for patients and families and the development of health promotion materials. The IRC provided technical support during the formation of the CHP and the drafting of the Health Promotion Program Framework, which began in August 1999 and continued through March 2000. All IRC community based public health education was and continues to be in collaboration with the CHP.

Dr. Mejreme Rexha and Marci Van Dyke developed a public health media campaign, which included: the design and distribution of health information literature, newspaper inserts, and radio spots. In September, the CHP identified a need to address the post-conflict increase in lice and scabies. 10,000 Lice and Scabies newspaper inserts and radio spots covering all of Kosovo were designed and disseminated. In December, IRC health educators designed and printed 25,000 lice leaflets to be distributed them through the regional and central IPHs.

In November, in preparation for World AIDS Day, HIV/AIDS brochures were designed and printed. 30,000 leaflets were distributed and radio messages (designed by IRC) were played as part of the activities. Dr. Rexha also conducted two HIV education sessions, one at a primary school for 40 students, and one at a high school for 60 students. Other brochures produced include: 30,000 on STDs, 84,000 on month-by-month pregnancy information, 13,500 on safe motherhood, and 7,500 on violence against women. (See Annex IX for brochure samples.)

From November 8 to November 19, IRC supported a two-week "training of trainers" course for 13 IPH health educators in collaboration with CHP, IPH, World Vision, and CARE. Individuals from the Mitrovica/Kosovska

Mitrovica, Gnjilane/Gjilane, Prizren, Djakova/Gjakova, Ferizaj/Uor-seva ç, Lujzan and Pristina/Prishtine IPHs participated in the course. The workshop, conducted at the Pristina IPH, included both the implementation of health education and clinical information. Technical areas included: antenatal care, maternal health, child development, infectious diseases, reproductive health, diarrhoeal diseases, sexually transmitted infections, and drugs and alcohol. (See Annex X for training schedule.)

In February, to assist with health education programs, each regional IPH received an overhead projector, spare bulbs, one projector screen, transparencies, one white board and markers. The central IPH, in March, received basic office equipment for the establishment of the CHP Health Material Production Center. Materials received by IPH included: 6 office chairs, 20 visitor chairs, 8 desks, one conference table, 4 filing cabinets, 2 bookshelves, 7 X 8 m floor carpet, 3 x 4 m floor carpet, 12 m curtain, and 6 desk lamps. Other NGOs have provided computers, printers, and a scanner. The office is currently operational and is headed by Dr. Bego Ili at IPH.

III. CONCLUSION

In summary, IRC's EPP program achieved the goals and objectives established in the OFDA grant: namely, to increase the ability of Kosovo's public health system to respond to epidemics and outbreaks of infectious disease and thereby prevent excess morbidity. As already stated, beneficiaries of the program were primarily public health professionals at the IPH working in the main office in Pristina/Prishtina and in the six constituent offices throughout the province. Given the promising results of the project so far, the long-term benefits will be significant. The EPP program puts in place an infrastructure for infectious disease surveillance and response that includes material support, training, education and generally, builds a capacity that will continue to develop and expand over time.

Toward this end, IRC received additional funding from the European Commission's European Community Humanitarian Office (ECHO) to continue activities begun under this OFDA grant. ECHO funding extended, in some cases, the scope of the objectives in the original EPP program and filled in the gaps. But the success of this OFDA grant made such an extension possible.

Most importantly, the long-term beneficiaries of IRC's EPP program will be the people of Kosovo. By helping to build the capacity of Kosovo's public health system, the benefits will be felt far into the future.

IRC POURS FOUNDATION FOR NEW IPH MICROBIOLOGY FACILITY

GNJILANE/GJILAN, May 13, 2000 – IRC shelter engineers, medical staff representatives from IPH and their supporters, gathered to celebrate the pouring of a foundation for a new IPH microbiology lab, an extension of the existing IPH facility. The new building funded by the IRC through a generous grant from the European Community Humanitarian Office (ECHO), will provide more laboratory space for the regional IPH. This new lab will also help to extend IPH's diagnostic capacity to eventually meet European standards.